Building Energy Efficiency Through Innovative Thermodevices (BEET-IT)

ARPA-E seeks to develop energy-efficient building cooling technologies that will reduce energy consumption and GHG emissions from: (a) overall cooling and (b) refrigerants used in vapor compression systems. ARPA-E seeks innovative research and development approaches in the following areas: 1) cooling systems that use refrigerants with low global warming potential; 2) energy-efficient air conditioning (AC) systems with an increased coefficient of performance (COP) for warm and humid climates; and 3) vapor-compression AC systems for recirculating air loads with an increased COP in hot climates. The U.S. market demands technologies that will retrofit into current cooling systems, while developing economies seek new cooling technologies. Developing these technologies significantly increase the U.S. technological lead in rapidly-emerging clean energy industries.

Timeline

- Secretary Steven Chu announced the funding opportunity at the Energy Innovation Summit on March 2, 2010.
- Secretary Steven Chu announced the award selections on July 12, 2010.

Project stats

- 16 projects, totaling approximately $30.3 million
- Complete descriptions can be found at: http://arpa-e.energy.gov/ProgramsProjects/BEETIT.aspx

Program Director

- Dr. Ravi Prasher